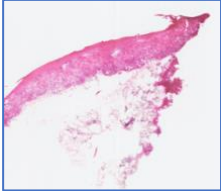
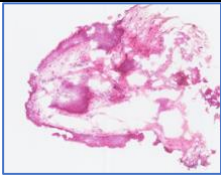
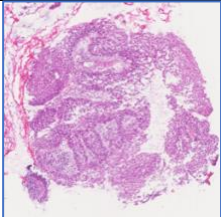
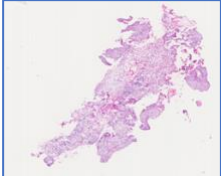


**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

ID	Sex	Age (1 <sup>st</sup> TP)	Date	Smoker (PY at 1st TP)	Location	WES	ScRNA (Plate / 10x)	Histology	H&E slide of block used for WES
5	M	74	July 2020	38	MC	TBD	Plate	SqM	N/A
5	M	74	August 2021	38	MC	Yes	Plate	MiD	
20	M	73	July 2021	39	RUL	TBD	Plate	SqM	N/A
73	M	67	July 2020	30	RUL	Yes	Plate	MiD	
73	M	67	July 2021	30	RUL	TBD	Plate	SqM	N/A
81	M	79	March 2008	22	RUL	Yes	No	CIS	
81	M	79	September 2011	22	RUL	Yes	No	CIS	

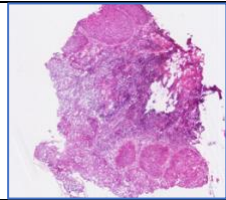
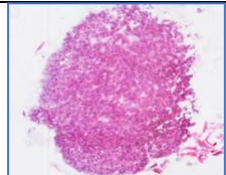
## Appendix A: Patient and lesion characteristics of samples analysed by WES and ScRNA seq

88	M	60	October 2019	NS	LUL/Lingula carina	Inadequate block	Plate	MiD		
106	M	86	October 2016	98	LLL <u>apical</u>	Yes	No	CIS		
106	M	86	February 2017	98	LLL <u>apical</u>	Yes	No	MoD		
106	M	86	July 2017	98	LLL <u>basal</u>	Yes	No	CIS		
106	M	86	December 2017	98	LLL <u>basal</u>	Yes	No	CIS		
106	M	86	April 2018	98	LLL <u>basal</u>	Yes	No	Cancer		

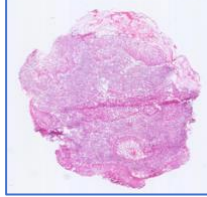
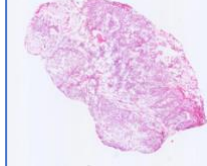
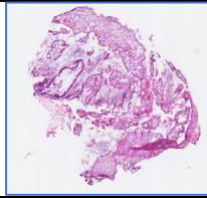
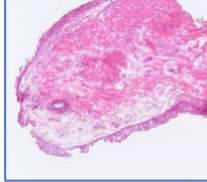
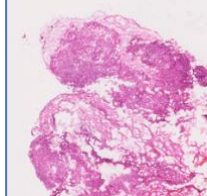
Notes on 10

T1N0M0 adenocarcinoma resected whilst under surveillance

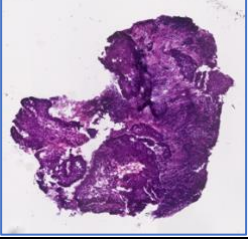
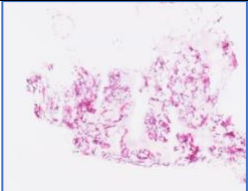
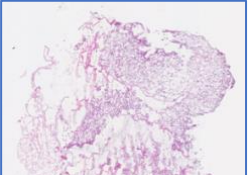
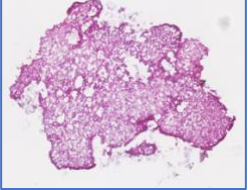
**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

111	M	60	December 2011	40	LLL <u>basal</u>	Yes	No	CIS		
111	M	60	March 2012	40	LLL <u>basal</u>	Bulk	No	CIS		
111	M	60	October 2013	40	LLL <u>basal</u>	Yes	No	INV		
118	M	75	March 2020	23	LUL/LLL	TBD	Plate	NAD		
119	M	70	November 2014	36	LUL	Yes	No	MiD		
119	M	70	February 2016	36	LUL	Yes	No	CIS+		

**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

119	M	70	November 2018	36	LUL Stump	Yes	No	CIS		
119	M	70	April 2019	36	LUL Stump	Yes	Plate	CIS		
119	M	70	July 2019	36	LUL Stump	TBD	Plate	CIS		
119	M	70	April 2018	36	LMB	Yes	No	MoD		
119	M	70	November 2018	36	LMB	Yes	No	CIS		

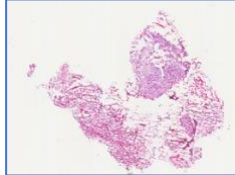
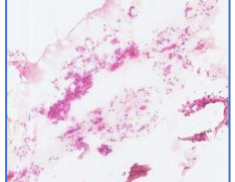
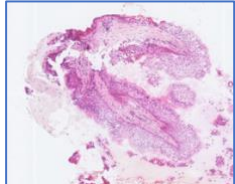
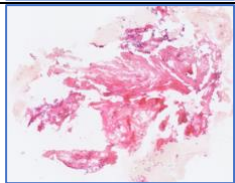
**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

119	M	70	July 2019	36	LMB	Yes	No	CIS +		
119	M	70	September 2019	36	LMB	No OCT block	Plate	CIS +	N/A	
127	M	66	July 2020	45	LLL	Yes	Plate	MoD		
127	M	66	July 2021	45	LLL	TBD	Plate	SqM	N/A	
128	F	57	January 2015	50	RLL	Yes	No	CIS		
128	F	57	July 2015	50	RLL	Yes	No	CIS		

**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

128	F	57	January 2016	50	RLL	Yes	No	CIS		
128	F	57	May 2017	50	RLL	Yes	No	INV		
132	M	72	March 2017	55	RMB	Yes	No	CIS		
132	M	72	July 2017	55	RMB	Yes	No	CIS		
132	M	72	September 2014	55	RIB/RUL carina	Yes	No	CIS		

**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

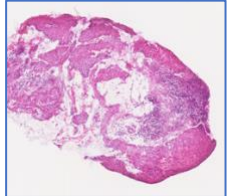
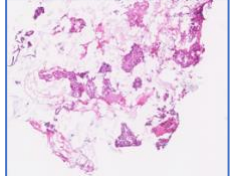
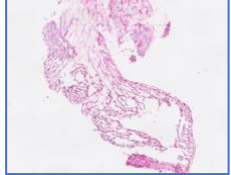
132	M	72	July 2017	55	RIB/RUL carina	Yes	No	INV		
133	M	62	December 2020	NS	RML	Yes	Plate	NAD		
135	F	58	April 2021	42	RUL	TBD	Plate	SqM	N/A	
137	F	80	August 2020	30	RMB	TBD	Plate	NAD	N/A	
137	F	80	August 2020	30	RML	TBD	Plate	NAD	N/A	
137	F	80	September 2021	30	RMB	Yes	Plate	NAD		
137	F	80	September 2021	30	RML	Yes	Plate	MiD		
140	F	59	March 2019	60	RUL	No OCT block	Plate	MiD	N/A	
141	M	70	August 2020	22	RUL	TBD	Plate	NAD	N/A	

**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

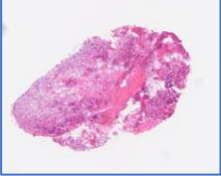
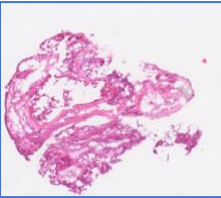
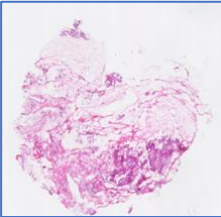
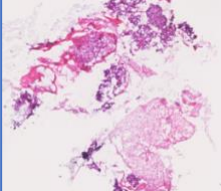
142	F	72	February 2019	60	RMB	Yes	No	CIS		
142	F	72	June 2019	60	RMB	Yes	No	INV		
145	M	65	January 2017	75	SL	Yes	No	MoD		
145	M	65	January 2018	75	SL	Yes	No	CIS		
145	M	65	January 2019	75	SL	Yes	Plate	CIS		



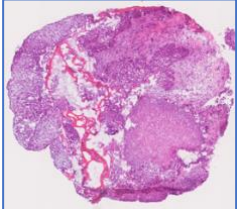
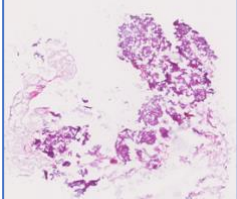
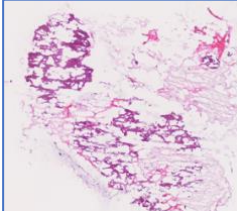
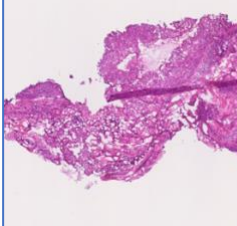
**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

145	M	65	June 2019	75	SL	Yes	No	CIS		
145	M	65	August 2019	75	SL	No OCT block	Plate	INV		
145	M	65	July 2020	75	SL	Yes	Plate	CIS		
145	M	65	October 2020	75	SL	Yes	Plate	INV		
147	M	67	September 2017	80	LLL stump	Yes	No	CIS		
147	M	67	December 2017	80	LLL stump	Yes	No	MoD		

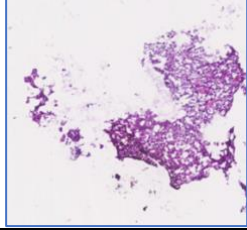
**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

147	M	67	June 2018	80	LLL stump	Yes	No	CIS		
147	M	67	January 2019	80	Left lower lobe stump	TBD	Plate	CIS	N/A	
147	M	67	October 2018	80	MC	Yes	No	CIS		
147	M	67	January 2019	80	MC	TBD	Plate	CIS	N/A	
149	M	70	May 2018	48	RLL apical	Yes	No	CIS		
149	M	70	December 2018	48	RLL apical	Yes	No	CIS		

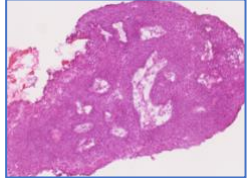
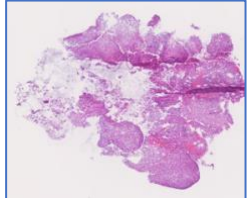
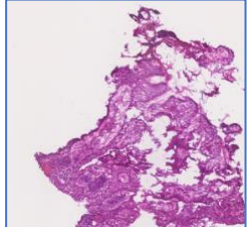
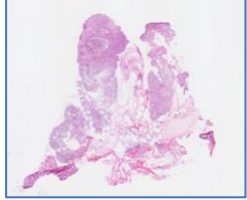
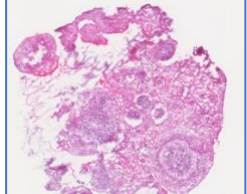
**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

149	M	70	April 2019	48	RLL apical	Yes	No	CIS		
149	M	70	September 2019	48	RLL apical	Yes	Plate	CIS		
149	M	70	February 2020	48	RLL apical	Not as yet	Plate	CIS	N/A	
149	M	70	June 2020	48	RLL apical	Yes	Plate	CIS		
149	M	70	December 2018	48	LUL/LLL	Yes	No	CIS		

**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

149	M	70	April 2019	48	LUL/LLL	Yes	No	CIS		
149	M	70	September 2019	48	LUL/LLL	Yes	Plate	INV		
149	M	70	February 2020	48	LUL/LLL	TBD	Plate	SqM	N/A	
149	M	70	June 2020	48	LUL/LLL	TBD	Plate	SqM	N/A	
150	M	67	February 2019	N/A	LUL anterior	Yes	Plate	CIS		
150	M	67	February 2019	N/A	LUL/LLL carina	OCT block inadequate	Plate	CIS	N/A	
151	M	77	February 2019	50	LLL apical	OCT block inadequate	Plate	NAD	N/A	
151	M	77	August 2020	50	LLL apical	OCT block inadequate	Plate	CIS	N/A	
151	M	77	June 2021	50	LLL apical	OCT block inadequate	Plate	CIS	N/A	

**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

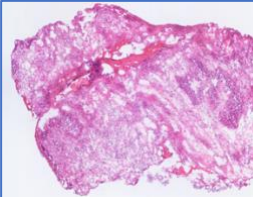
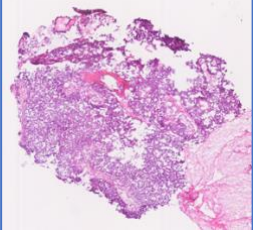
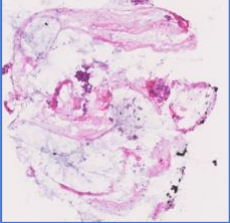
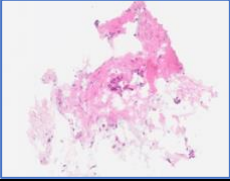
152	M	79	September 2018	80	RIB	Yes	No	CIS		
152	M	79	January 2019	80	RIB	TBD	Plate	CIS	N/A	
152	M	79	May 2019	80	RIB	Yes	Plate	CIS		
152	M	79	September 2019	80	RIB	Yes	Plate	CIS		
152	M	79	January 2020	80	RIB	Yes	Plate	CIS		
152	M	79	June 2020	80	RIB	Yes	Plate	INV		

**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

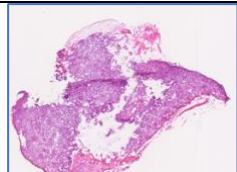
152	M	79	March 2021	80	RIB	Yes	Plate	INV		
152	M	79	January 2019	80	LMB	Yes	No	MoD		
152	M	79	May 2019	80	LMB	Yes	No	MoD		
152	M	79	September 2019	80	LMB	TBD	Plate	CIS	N/A	
152	M	79	January 2020	80	LMB	Yes	Plate	CIS		
152	M	79	June 2020	80	LMB	Yes	Plate	CIS		

Notes on patient 152

**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

Previous lung squamous cell cancer right lower lobe										
153	F	75	March 2019	63	LT	Yes	Plate	CIS		
153 (EAR 006)	F	75	January 2022	63	LT	Yes	Plate	CIS		
155	F	73	December 2019	55	RUL	Yes	Plate	CIS		
155	F	73	July 2020	55	RUL	Block inadequate	Plate	NAD	N/A	
155	F	73	August 2021	55	RUL	Yes	Plate	NAD		
160 (EAR 005)	F	74	October 2021	50	MC	TBD	Plate	SqM	N/A	

**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

160 (EAR 005)	F	74	October 2021	50	RLL apical	TBD	Plate	SqM	N/A
161 (EAR 008)	M	73	December 2021	81	RIB stump	TBD	Plate	CIS	N/A
161 (EAR 008)	M	73	December 2021	81	RUL	TBD	Plate	MoD	N/A
163 (EAR 009)	M	69	January 2022	50	LT	Yes	Plate	MoD	
164 (EAR 010)	M	62	February 2022	35	RUL anterior	TBD	Plate	SqM	N/A

**KEY**

M: Male

F: Female

TP: Timepoint

NS: Never smoker

N/A: Not available

PY: Pack years

WES: Whole exome sequencing

ScRNA: Single cell RNA sequencing

H&E: Haematoxylin and eosin

CIS: Carcinoma in situ

LUL: Left upper lobe



**Appendix A:** Patient and lesion characteristics of samples analysed by WES and ScRNA seq

LLL: Left Lower lobe  
RIB: Right intermediate bronchus  
RLL: Right lower lobe  
RUL: Right upper lobe